California Regional Water Quality Control Board
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Arnold Schwarzenegger
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August 9, 2010

Chris Crompton
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COMMENTS ON THE TECHNICAL GUIDANCE DOCUMENT ACCOMPANYING THE MODEL WATER QUALITY MANAGEMENT PLAN FOR THE COUNTY OF ORANGE AND INCORPORATED CITIES

Dear Mr. Crompton:

We have completed our review of the updated Model Water Quality Management Plan ("MWQMP") submitted on May 24, 2010, pursuant to Provision XII.C.1. of Regional Board Order No. R8-2009-0030, commonly known as the Orange County Urban Storm Water Runoff Permit ("Permit"). Included in the MWQMP is the Technical Guidance Document which includes the technically-based feasibility criteria developed pursuant to Provision XII.E.1. of the Permit. As you are aware, compliance with both of these Provisions involves the approval of these documents by the Executive Officer.

The MWQMP generally describes the process and requirements for the preparation of project Water Quality Management Plans ("WQMP"). The Technical Guidance Document provides supporting technical detail for the MWQMP. We provided general comments on the MWQMP in a letter dated July 9, 2010 and detailed comments within an electronic copy of the MWQMP transmitted on July 20, 2010.

As with our comments on the MWQMP, this letter provides our general comments on the Technical Guidance Document with detailed comments provided in an electronic copy of the Document which will be transmitted separately. Even though we will have provided detailed comments, of which many are editorial in nature, it is not our intent to take on editorial responsibilities for the submittals. We expect that you will make changes to the Technical Guidance Document, as indicated by our detailed comments, and that you will make further changes in response to the general comments below.

As with our review of the MWQMP, during our review of the Technical Guidance Document, we considered: 1) how instructive the document is to the intended audience; 2) the transparency of the described processes; and 3) consistency of the MWQMP and the Technical Guidance Document with the requirements of the Permit. The intended audience is principally technical staff involved in the preparation and review of project WQMPs. To a lesser extent, the audience includes members of the public who may

want to understand how the water quality impacts of urban development are being addressed by the Permittees. With these considerations, we provide the following comments:

1) The Technical Guidance Document needs to include a clear description of its intended users and instructions on how they are to use the Document.

2) Due to its volume, the Technical Guidance Document is likely to be used as a reference resource by its intended users, rather than being read in whole on a regular basis. Consequently, it is imperative that the Document be organized accordingly. Significant improvements are needed towards this end.

    a. Design and performance criteria need to be readily distinguishable, consolidated and organized so that the user is readily able to find them.

    b. The sub-headings and corresponding table of contents needs to more instructively and precisely describe the subject of the related sections. For example, although Section 2.2.2. is titled "Low Impact Development BMP [best management practice] Performance Criteria" the Section is principally composed of a narrative description of categories of low impact development ("LID") BMPs. While performance criteria are presented for some of the LID BMPs, they are not distinguished from the narrative and not all related criteria are presented.

    c. All key terms need to have definitions provided either in the glossary or in the text of the appropriate sections.

    d. Multiple terms which apply to the same concept or idea need to be condensed to a single term and that term used consistently.

    e. General terminology needs to be substituted with precise terminology wherever the precise terminology is most descriptive. For example, Example 6.1 is titled "Computing Design Criteria using Simple Method" where "Design Criteria" would more precisely be substituted with "design capture volume".

3) The method described for calculating the design capture volume in Section 2.3.1. is incorrect. The Permit requires that the storm volume be captured for LID BMPs, not the resulting runoff.

4) The Technical Guidance Document includes descriptions of the obligations of the Permittees for the development of project WQMPs. By itself or as a companion to the MWQMP, the Technical Guidance Document is not enforceable on project proponents; however, it contains language that suggests that this is its purpose. The Permittees will need to secure appropriate legal authority to impose the requirements of the Technical Guidance Document on project proponents. The MWQMP needs to describe the method(s) and related processes that each of the

Permittees will employ to assure their legal authority to implement the MWQMP and the Technical Guidance Document.

5) The Technical Guidance Document needs to include corresponding forms and worksheets to assist preparers and reviewers of project WQMPs. The Document includes language in several locations suggesting that a project WQMP template and worksheets exist, but the template and worksheets are not included.

6) The Technical Guidance Document includes unacceptably vague descriptions of processes, or references to processes that are not described at all. These processes must be either fully described so that they may be evaluated by the public and for approval by the Executive Officer, or they must be deleted. Some of these processes are called out in the forthcoming detailed comments. Examples include (but are not limited to) a reference to an alternative CEQA, a significance-based process in Section 8.4.2., minimum sizing, residence time and performance criteria for all LID bio-treatment BMPs, and a performance comparison between treatment control BMPs and LID BMPs in Section 8.1.

7) The Technical Guidance Document needs to describe a mechanism for comparing the performance of all available treatment control BMPs and biotreatment BMPs to assure that pollutants are addressed. The current MWQMP provides a "Treatment Control BMP Selection Matrix", however, no similar mechanism is provided in the proposed MWQMP. Please be advised that Provision XII.B.1. requires that "Within 12 months of adoption of this order, the principal permittee shall revise the appropriate tables in the [WQMP] with the latest information on BMPs and provide additional clarification regarding their effectiveness and applicability." *After reviewing the contents of the May 24 submittal, we have concluded that you have not complied with this Provision.* Section 6.0 of the Technical Guidance Document does not contain effectiveness information for many of the BMPs described and is missing new technologies such as modular biofilters (e.g. Filterra) and antimicrobial media applications (e.g. Smart Sponge).

8) The Technical Guidance Document suggests that, where reclaimed wastewater is available for use by a project, storm water capture and use may be precluded. The rationale for this assertion is not provided. While we support the use of reclaimed wastewater, you have not provided any analysis that storm water capture and use precludes the use of reclaimed wastewater, or vice versa, for all projects. The Executive Officer cannot approve the technical feasibility analysis, and tacitly approve of your assertion, without supporting analysis.

9) The Technical Guidance Document proposes to use "average annual capture efficiency" or "capture efficiency" in lieu of "design capture volume" under certain circumstances. Before this alternative sizing criteria can be considered for approval, the rationale for its use must be explained. In addition, the

circumstances for its use must be clearly described in both the MWQMP and the Technical Guidance Document. Regional Board staff recommends that a technical rationale be provided in a singular location as an appendix to the MWQMP rather than including it within the text.

10) The Technical Guidance Document describes processes for identifying pollutants of concern and priority pollutants of concern. However, it provides no instruction to the users on how this information is to be used in the selection of treatment control BMPs.

11) The Technical Guidance Document provides several flow charts that represent the process for analyzing the feasibility and subsequent implementation of BMPs for a project with respect to the hierarchy required by the Permit. The hierarchy itself is not illustrated separately. A simplified table or figure that lists the categories of BMPs according to the hierarchy is needed for ease of reference.

12) The criteria used for the development of the Hydromodification Susceptibility Analysis maps do not consider planned channel improvements for flood protection. This narrow approach is inconsistent with the underlying principles of Integrated Regional Water Management Planning and could lead to project proponents unnecessarily implementing Hydrologic Source Controls to protect channels that might ultimately be armored under any circumstance. The Susceptibility Analysis must account for all factors that are the result of hydromodification.

If you have any questions, please contact Adam Fischer at afischer@waterboards.ca.gov or at (951) 320-6363 or Mark Smythe at msmythe@waterboards.ca.gov or at (951) 782-4998.

Sincerely,

Michael J. Adackapara
Division Chief